

REMARKS

Claims 1, 2, 4-13 and 15-20 are pending in this application. By the Office Action, claims 6-10 and 16-20 were withdrawn as being directed to a non-elected invention; and claims 1-5 and 11-15 are rejected over art.

By this Amendment, claims 3 and 14 are canceled without prejudice to or disclaimer of the subject matter contained therein; and claims 1 and 11 are amended. Claims 1 and 11 are independent.

Information Disclosure Statement

Applicants have not received from the Examiner an initialed copy of the Form PTO-1449 filed in an Information Disclosure Statement on November 7, 2004. The Examiner is requested to initial and return to the undersigned a copy of the form PTO-1449. For the convenience of the Examiner, a copy of the Form PTO-1449 is attached for the Examiner's consideration.

35 U.S.C. § 102 (b) Rejection - Tanabe

Claims 1-3, 5, 11 and 13-15 are rejected under 35 U.S.C. §102(b) as being anticipated by Tanabe, (JP 08037276 A). This rejection is respectfully traversed.

Initially, the rejection of claims 3 and 14 have been rendered moot as these claims have been canceled.

Tanabe fails to disclose or suggest the leadframe body is of a lead-on-chip (LOC) type, as recited in claims 1 and 11.

Tanabe merely discloses an insulating adhesive tape 9 that is adhered to tips of a plurality of inner leads 2 and cut together with the inner leads 2 (see Fig. 3 of Tanabe).

However, it is submitted that the lead frame covering the inner leads 2 of Tanabe is not a lead-on-chip (LOC) type (see Figs. 1 and 4 of Tanabe).

Accordingly, Tanabe fails to disclose or suggest the leadframe body is of a lead-on-chip (LOC) type, as recited in claims 1 and 11.

Because Tanabe does not disclose each and every features of the claimed invention, it cannot provide a basis for rejection under 35 U.S.C. §102.

Applicants respectfully submit that dependent claims 2, 5, 11, and 14-15 are allowable by virtue of their dependency on allowable independent claims 1 or 11 for at least the reasons set forth above. Withdrawal of the rejection is respectfully requested.

35 U.S.C. § 102(b) Rejection - Chan

Claims 11 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Chan et al. (hereinafter “Chan”), U.S. Patent 6,236,107. This rejection is respectfully traversed.

Chan fails to disclose or suggest “the leadframe body is of a lead-on-chip (LOC) type...the tape ending at an end of each of the plurality of leads,” as recited in claim 11.

Although Chan may disclose a semiconductor chip having a lead frame 10 attached to an integrated circuit die 30 by a lead-on-chip (LOC) method, it is submitted that the lead-on-chip method of Chan is different from Applicants’ invention because Chan requires a different manufacturing process than the claimed invention.

Further, Chan fails to disclose that the tape ends at an end of each of the plurality of leads, as recited in claim 11.

As an exemplary embodiment of the present invention, Fig. 17 illustrates the tape 106’ ending at the end (or edge) of each of the plurality of leads 104’.

Chan discloses the plurality of leads located ‘within’ the adhesive tape 20 (Fig. 3), rather than the tape ending at an end of the plurality of leads.

Accordingly, Chan fails to disclose or suggest “the leadframe body is of a lead-on-chip (LOC) type...the tape ending at an end of each of the plurality of leads,” as recited in claim 11.

Applicants submit that claim 12 is allowable by virtue of its dependency on allowable independent claim 11, for at least the reasons set forth above. Withdrawal of the rejection is respectfully requested.

Claim Rejection – 35 U.S.C. § 103

Claim 4 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Tanabe in view of Chan. This rejection is respectfully traversed.

As discussed above, Tanabe neither discloses nor suggest Applicants’ claimed invention as found in claim 1, the independent claim from which the rejected claim 4 depends. Chan fails to overcome the noted deficiencies of Tanabe.

Further, one of ordinary skill in the art would not have been motivated to combine the teachings of Tanabe with the teachings of Chan with any expectations of success because Chan cannot provide a procedure for cutting the inner leads (e.g., Chan requires forming wire bond 40 to connect the integrated circuit 30 to a conduction lead and lead frame 10). Accordingly, if the alleged modification or a combination of the prior arts would change the principle of operation of the prior art invention, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Absent such a *prima facie* case of evidence, there would have been no motivation to combine the references of Tanabe and Chan, as suggested by the Examiner.

For at least these reasons, Applicants respectfully submit that Tanabe and Chan, individually or in combination, fail to disclose or render obvious the features recited in dependent claim 4. Reconsideration and withdrawal of the rejection are respectfully requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of claims 1, 2, 4, 5, 11-13 and 15 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By

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Attachment: Form PTO-1449